

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF MICHIGAN  
SOUTHERN DIVISION

TK HOLDINGS, INC.,

Plaintiff/Counter-Defendant,

-vs-

CTS CORP., et al.,

Defendants/Counter-Plaintiffs.

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Case No. 08-14266

HON. AVERN COHN

**CTS CASE**

**MEMORANDUM AND ORDER ON CLAIM CONSTRUCTION - THE '891 PATENT**

**I. Introduction**

This is a patent case.<sup>1</sup> CTS Corporation (CTS) has sued TK Holdings, Inc. (TK) claiming infringement of three of CTS's patents, owned by assignment. The patents at issue are as follows:

U.S. Patent No. 6,431,013, B2, Strain Gage Having An Attached Unstrained Area for the Mounting of Signal Conditioning Components ("the '031 patent")

U.S. Patent No. 6,467,361 B2, Strain Gage Sensor Having an Unstrained Area ("the '361 patent")

U.S. Patent No. 6,161,891, Vehicle Seat Weight Sensors ("the '891 patent")

The '031 and the '361 patents were the subject of a Markman proceeding. See

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<sup>1</sup>Initially, there were essentially parallel cases involving the parties. In the first part of the case, TK, owner by assignment of U.S. Patent No. 7,100,944 B2 ("the '944 patent"), Method of Attaching a Seat Belt to a Seat Belt Tension Sensor, sued CTS claiming infringement. This part of the case, referred to as the TK case, settled after the Court issued a Markman decision regarding the disputed phrases of paradigm Claim 19 of the '944 patent. See Memorandum and Order on Claim Construction (Doc. 69).

Memorandum and Order on Claim Construction. (Doc. 71).<sup>2</sup> Each of these patents relates to an automobile weight sensor which detects the presence and weight of a person in a car seat. Particularly, the sensor uses strain sensitivity resistors which produce an electric signal to control the activation of an air bag.

Now before the Court are Markman proceedings on the '891 patent. CTS has identified claim 6 as the paradigm claim. (Doc. 88). TK has identified a single phrase in claim 6 which it says is ambiguous and requires interpretation. (Doc. 93). The phrase is:

“neckdown region”

The respective positions of the parties together with the Court's resolution are displayed in the claim chart attached as Exhibit A. As the Court has repeatedly observed, claim construction in a Markman proceeding is always tentative and its conclusions are open to change as the case unfolds.

## **II. Legal Standard**

### **A. Generally**

Claim construction is a matter of law for the Court. Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370

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<sup>2</sup>CTS has moved for reconsideration of the Court's interpretation of the phrase “step section” in the '013 patent and the '361 patent and the phrase “unstrained resistor” in the '361 patent. See Docs. 110, 120. These motions are the the subject of a separate decision.

(1996).<sup>3</sup> The focus is on “what one of ordinary skill in the art<sup>4</sup> at the time of the invention would have understood the term to mean.” *Id.* at 986. The Court of Appeals for the Federal Circuit recently stated: “Claim terms generally are construed in accordance with the ordinary and customary meaning they would have to one of ordinary skill in the art in light of the specification and the prosecution history.” Aventis Pharma S.A. v. Hospira, Inc., \_\_ F.3d. \_\_\_, 2012 WL 1155716, \*2 (Fed. Cir. Apr. 9, 2012) (citing Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc)).

### **B. Specifically**

The first step in construing a patent claim is to examine the intrinsic evidence:

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<sup>3</sup>See also The Sedona Conference Report on the Markman Process, June 2006 Public Comment Version, available at [www.thesedonaconference.org](http://www.thesedonaconference.org) and Patent Case Management Judicial Guide (Federal Judicial Center 2009), Chapter 5.

<sup>4</sup>The parties disagree over the definition of one skilled in the art. TK initially took the position that one skilled in the art “would have a bachelors’s degree in mechanical or electrical engineering, with at least five years of experience in the automotive field, with substantial knowledge and experience related to sensor design, control systems, and circuit design.” (Doc. 109-4).

CTS agrees that one skilled in the art would have a bachelors degree in mechanical engineering or mechanical design but says such a person must have at least two years of experience in sensor technology.

TK, however, now suggests that one skilled in the art must be skilled in the field of strain gage technology. Indeed, attached to its Markman papers is a declaration of Thomas M. Johnson, who has been retained by TK as a technical expert to support TK’s proposed interpretation of the phrase in dispute. While Johnson is a mechanical engineer, his declaration states in several places that he has worked with “strain gage sensors” and his statements are limited to “the field of strain gage technology.” Limiting one of ordinary skill in the art to only the field of strain gage technology is not appropriate. Rather, as the Court assumed in its Markman order on the ‘013 and ‘361 patents, one skilled in the art is a mechanical or electrical engineer. The Court adds that one skilled in the art has knowledge of sensor design, control systems, and circuit design. Whether they have two or five years experience is not material.

First, we look to the words of the claims themselves, both asserted and nonasserted, to define the scope of the patented invention. Although words in a claim are generally given their ordinary and customary meaning, a patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning, as long as the special definition of the term is clearly stated in the patent specification or file history.

Thus, second, it is always necessary to review the specification to determine whether the inventor has used any terms in a manner inconsistent with their ordinary meaning. The specification acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication. . . . The specification contains a written description of the invention which must be clear and complete enough to enable those of ordinary skill in the art to make and use it. Thus, the specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.

Third, the court may also consider the prosecution history of the patent, if in evidence. This history contains the complete record of all the proceedings before the Patent and Trademark Office, including any express representations made by the applicant regarding the scope of the claims. As such, the record before the Patent and Trademark Office is often of critical significance in determining the meaning of the claims. Included within an analysis of the file history may be an examination of the prior art cited therein.

Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996) (citations omitted).

These sources are analyzed in a hierarchical fashion, beginning with the “ ‘heavy presumption’ ” that claim terms mean what they say and carry their ordinary meaning as viewed by one of ordinary skill in the art. W.E. Hall Co. v. Atlanta Corrugating, LLC, 370 F.3d 1343, 1350 (Fed. Cir. 2004) (citing Johnson Worldwide Assocs., v. Zebco Corp., 175 F.3d 985, 989 (Fed. Cir. 1999)); Intellectual Property Dev., Inc. v. UA-Columbia Cablevision of Westchester, Inc., 336 F.3d 1308, 1315 (Fed. Cir. 2003). Dictionaries, encyclopedias, and treatises may be used to discover a term's ordinary meaning.

Altiris, Inc. v. Symantec Corp., 318 F.3d 1363, 1369 (Fed. Cir. 2003); Texas Digital Sys., Inc. v. Telegenix, Inc., 308 F.3d 1193, 1202-03 (Fed. Cir. 2002).

TK, as it did in the Markman proceeding involving the '013 and '361 patents, says that the specification plays a critical, if not dispositive role, in interpreting the disputed phrase in the paradigm claim. The Court previously articulated the law on the role of the specification in determining a claim term's meaning in the Memorandum and Order on Claim Construction (Doc. 71 at pp. 4-6) which is incorporated by reference. See also Honeywell Intern.. Inc. v. ITT Indus.. Inc., 330 F. Supp. 2d 865, 867-77, 878-79 (E.D. Mich. 2004).

In short, a claim term must be given its ordinary meaning unless the patentee redefined the term in the specification or characterized "the invention in the intrinsic record using words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope." Teleflex, Inc. v. Ficosa North America, 299 F.3d 1313, 1327 (Fed. Cir. 2002).

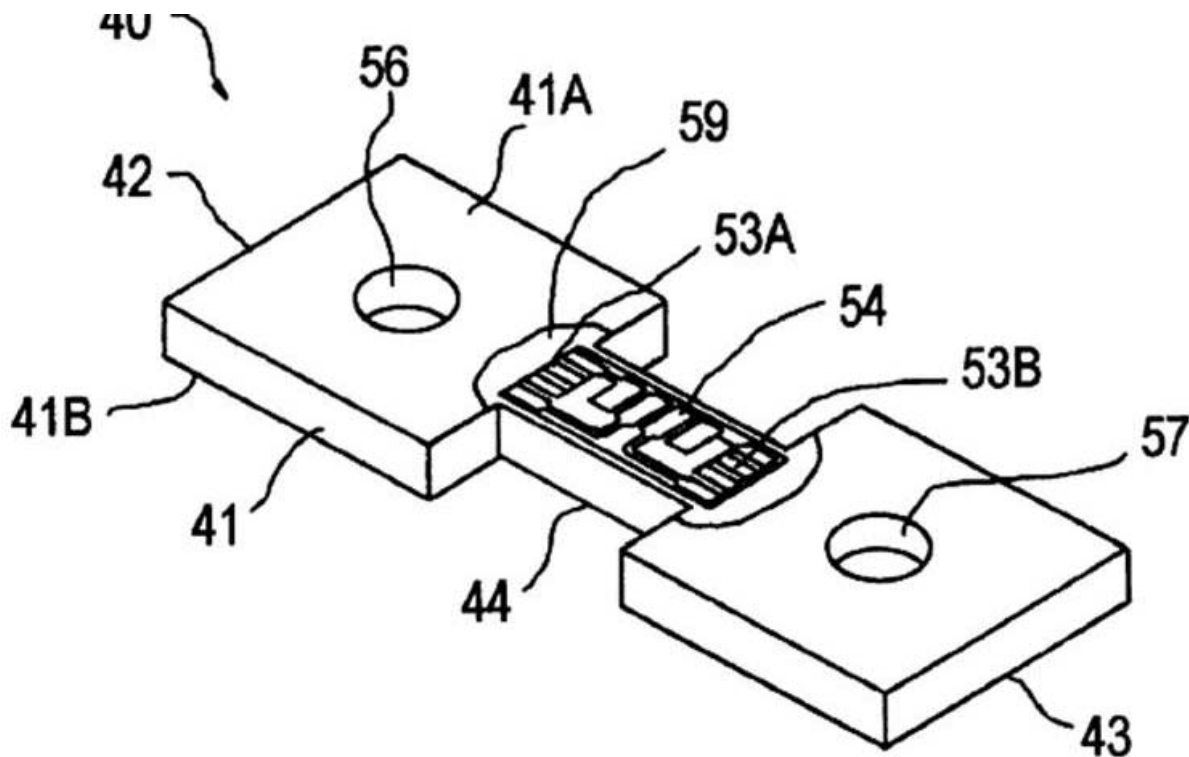
With these principles in mind, the Court considers the disputed phrase.

### **III. Background**

#### **A. The '891 Patent**

The '891 patent is entitled "Vehicle Seat Weight Sensor." Like the other patents in this case, it is directed towards a vehicle seat weight sensor for detecting the presence of an occupant in an automobile seat and providing an electrical signal used to control activation of an airbag. The particular type of weight sensor disclosed in the '891 patent is a "resistive strain gauge sensor." It detects and measures strain placed on electrical strain gauge resistors caused by a force, in this case, weight. (the '891

patent, Col. 1, ll. 29-34.) Strain gage resistors are resistors whose resistance to the flow of electrical current changes based on the dimensional change of the resistor caused by a mechanical strain applied to the resistor. (*Id.* at Col. 1, ll. 31-34.) A single embodiment of a vehicle seat weight sensor substrate is disclosed in the '891 patent. The substrate is shown in figure 3, which is reproduced below with the reference numbers identified in accordance with the terminology used in the written description of the specification.



**FIG. 3**

**B. Claim 6**

## 1.

As noted above, CTS designated claim 6 as the paradigm claim. (Doc. 88). TK then identified ambiguous word/phrase in claim 6. (Doc. 93). CTS then responded with its proposed constructions of the phrase identified by TK, followed by TK's proposed construction. See Doc. 94, 102. After that the parties filed Markman briefs. (Docs. 104, 107, 109, 114).

Claim 6, in alphanumeric format, reads (with the disputed phrase in bold):

1. A vehicle seat weight sensor for sensing weight of an occupant in a vehicle seat for use by an airbag control system, the seat having a seat back, a seat bottom and a seat bracket connected to a vehicle floor, a lower slide rail, and an upper slide rail coupled to the seat bracket and a seat pan attached to the upper rail, the sensor comprising:
  - a) at least one generally horizontally elongated substrate, disposed between said seat bottom and said vehicle floor such that a portion of the weight of said occupant on said seat bottom is transferred from said seat bottom to said vehicle floor through said substrate, said substrate having a first and a second end;
  - b) a **neckdown region** formed in said substrate between said first and second ends for concentrating the weight of said occupant thereon; and
  - c) a plurality of strain gauge resistors, located on said neckdown region of said substrate, for generating an electrical signal in response to said substrate being stressed by the weight of said occupant, said electrical signal changing magnitude as a function of the weight of said occupant.

The parties' meanings for the disputed phrase "neckdown region" are as follows:

CTS	TK
a relatively narrower elongated connecting portion	the narrowest region connecting the first and second ends of a substrate

## IV. Discussion

### A. As Used in the Patent

The '891 describes "a neckdown region formed in said substrate between said first and second ends for concentrating the weight of said occupant thereon." (the '891 patent, Col. 8, ll. 9-11). The phrase "neckdown region" appears in the Summary of the Invention portion of the patent, describing its function:

The sensor includes a horizontally elongated substrate that is located between the seat bottom and the vehicle floor such that a portion of the weight of the seat occupant on the seat bottom is transferred from the seat bottom to the vehicle floor through the substrate. The substrate has a first and second end. A **neckdown region** is formed in the substrate between the first and second ends for concentrating the weight of the vehicle occupant. Several strain gauge resistors are located on the **neckdown region** for generating an electrical signal in response to the substrate being stressed by the weight of the seat occupant.

(Id. at Col. 2, ll. 16-22.)

The phrase also appears in the Detailed Description of the Preferred Embodiments, referencing Figure 3, as follows:

Substrate 41 has a first end 42, a second end 43 and a **neckdown region** 44 located between first end 42 and second end 43

(Id. at Col. 4, ll. 21-23).

Several strain gauge resistors 53A and 53B are arranged on surface 41A at the junction of the **neckdown region** and the first and second end, respectively.

(Id. at Col. 4, ll. 26-28).

### B. Parties' Arguments

Both CTS and TK agree that the "neckdown region" is a relatively narrow portion of the substrate. TK, however, says that the claimed "neckdown region," is only the very narrowest portion of the substrate. In support, TK relies on extrinsic evidence in the form of a declaration from its technical expert, Johnson, who states that "neckdown"



and “neckdown region” have no common meaning in the art of strain gage technology. He goes on to state that CTS’s interpretation (1) does not make clear that the neckdown region connects two substrates, (2) does not make clear that the neckdown region is the narrowest portion between the two substrates. According to Johnson, a central feature of the ‘891 patent is to locate the strain gages on the narrowest portion of the substrate, which the strain/weight is concentrated to a maximum level and can be readily detected. Thus, Johnson concludes that the phrase “neckdown region” must be interpreted to mean the “narrowest region connecting the first and second ends of a substrate.”

CTS says TK’s interpretation is unduly restrictive. CTS says that the phrase “neckdown region” should be defined by simply looking to the ordinary meaning for “neck.” CTS also notes that the phrase “neckdown” has a well understood meaning in the general field of engineering. CTS cites to a handful of examples from other patents from the engineering arts which use the phrase “neckdown” or the variants “neck-down” or “neck down.” All of these examples show that the “neckdown” region or area is a connecting portion that narrows from portions that it connects. CTS also argues that these examples establish that “neckdown” has a broader meaning than simply the narrowest portion of a substrate. Rather, the neckdown region may be an irregularly shaped area and have varied degrees of narrowing.

### **C. Analysis**

1.

CTS has the better position. While the precise phrase “neckdown region” may not appear in a dictionary, it is clear that the phrase is comprised of common everyday words: neck, down, and region.<sup>5</sup> By applying the common meaning to these words, the phrase “neckdown region” should be interpreted to mean, “a relatively narrower elongated connecting portion.” The Federal Circuit has observed that “[i]n some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of widely accepted meaning of commonly understood words. In such circumstances, general purpose dictionaries may be helpful. Phillips v. AWH Corp., 415 F.3d 1303, 1314 (Fed. Cir. 2005). The Federal Circuit goes on to say that a court may consult a dictionary “and may . . . rely on dictionary definition when construing claim terms, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents.” Id. at 1322.

The ordinary definition for “neck” is “a relatively narrow elongation, projection, or connecting part.” The American Heritage Dictionary of the English Language, Houghton Mifflin Company, (4th ed. 2000), p. 1175; see also Webster's Third New International Dictionary, Meriam-Webster Inc., (1993), p. 1511 (neck defined as “a relatively narrow

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<sup>5</sup>The Court located two papers which used the phrase “neckdown” and “neck-down.” One used the phrase “neckdown” to describe a traffic configuration used for speed control or “traffic calming.” See <http://www.students.bucknell.edu/projects/trafficcalming/Measures/Neckdown.html> (last visited July 3, 2012). The other is a study from the Journal of Applied Physics entitled “Physical Behavior of the Neck-down Region During Furnace Drawing of Silica Fibers.” Both papers support CTS’s position that the phrase “neckdown region” has no particular or special meaning. See [http://jap.aip.org/resource/1/japiau/v49/i8/p4417\\_s1?isAuthorized=no](http://jap.aip.org/resource/1/japiau/v49/i8/p4417_s1?isAuthorized=no) (last visited July 3, 2012).

or constricted part joining two other parts or located at an end and suggestive of a neck”).

“Down” means reduced or diminished. The American Heritage Dictionary of the English Language, Houghton Mifflin Company, (4th ed. 2000), 541.

“Region” means “a large, usually continuous segment of a surface or space; area.” *Id.* at p. 1470.

Combining these meanings, a “neckdown region” is reasonably defined as an area of the substrate that is elongated, connects other portions of the substrate, and is relatively narrower than the portion of the substrate it connects. It is, as CTS contends, “a relatively narrower connecting portion.”

Moreover, this interpretation is consistent with the ‘891 patent specification and accompanying drawings. In Figure 3, above, the claimed neckdown region is a narrower elongated portion that connects the first and second ends. TK’s proposed interpretation adds the restrictive limitation that the “neckdown region” be defined as only “the narrowest region” of the substrate. Although the “neckdown region” shown in Figure 3 appears to have a uniform width, and is the narrowest portion of the substrate, the specification does not give any indication that the neckdown region 44 is of a uniform width. Reliance on the drawing of a preferred embodiment to restrict the a claim is generally not proper. “[I]t is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue.” Hockerson-Halberstadt v. Avia Group Intern., 222 F.3d 951, 956 (Fed. Cir. 2000). There is nothing in the intrinsic evidence which suggests that the claimed “neckdown region” is to be limited to only a

“narrowest region” of the substrate. A claim should not be limited to a specific preferred embodiment unless the intrinsic evidence makes it abundantly clear that the patentee intended such a narrow interpretation. Liebel-Flarsheim, 358 F.3d at 904.

As will be explained more fully below, the text of the ‘891 patent does not contain any indication that “neckdown region” be limited to only the “narrowest” part of the substrate, or that the substrate is somehow limited to the specific shape shown as a preferred embodiment. To the contrary, the ‘891 patent states that “the shape of substrate 41 could be varied to any configuration that would transfer the weight from the seat and concentrate it in the desired location on the substrate.” (the ‘891 patent, Col. 6, ll. 10-13). Overall, there is no intrinsic evidence which provides a basis for limiting claim 6 such that the neckdown region is only the “narrowest” portion of the substrate.

## 2.

TK’s interpretation is, in essence, an attempt to read the preferred embodiment shown in Figure 3, as limiting claim 6. This is improper for several reasons. First, “[i]t is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” Phillips, 415 F.3d at 1312.

Nowhere in any of the claims of the ‘891 patent is there a suggestion that “neckdown region” is only the narrowest portion of the substrate. TK cites two parts of the specification discussing the “neckdown region,” and says that the intended meaning of neckdown is evident from its usage to refer to the narrowest section of the substrate. However, a review of the cited passages shows that the word “narrowest” is not used nor is there a suggestion that only the narrowest portion of the substrate is the “neckdown region.” The Federal Circuit has cautioned against a claim construction like

TK's, which seek to limit a claim to a preferred embodiment. Teleflex, Inc. v. Focosa N. Am. Corp., 299 F.3d 1313, 1327-28 (Fed. Cir. 2002). “[P]articular embodiments and examples appearing in the specification will not generally be read into the claims.” Constant v. Advanced Micro-Devices, Inc., 848 F.2d 1560, 1571 (Fed. Cir. 1988). The Federal Circuit “expressly reject[s] the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment.” Phillips, 415 F.3d at 1323.

There is a “fine line between reading a claim in light of specification and importing a limitation from the specification into the claim.” Arlington Ind., Inc. v. Bridgeport Fittings, Inc., 632 F.3d 1246, 1255 (Fed. Cir. 2011). Here, the Court is not convinced that the specification should control the meaning of claim 6, particularly the phrase “neckdown region.” Rather, the specification displays an intent not to limit the claims to a particular embodiment. The specification explicitly states the drawings are not intended to limit the scope of the claims:

It is noted that the drawings of the invention are not to scale. The drawings are merely schematic representations, not intended to portray specific parameters of the invention. The drawings are intended to depict only typical embodiments of the invention, and therefore should not be considered as limiting the scope of the invention.

(the ‘891 patent, Col. II:14-19). The specification further states that “the shape of substrate 41 could be varied to any configuration that would transfer the weight from the seat and concentrate it in the desired location on the substrate.” Id. at col. 6, II. 10-13. The specification also explains that “[t]he described embodiments are to be considered in all respects only as illustrative and not restrictive. The scope of the invention is, therefore, indicated by the appended claims rather than by the foregoing description.”

Id. at Col. 6, ll. 35-39. Thus, it cannot be said that the patentee clearly had a desire to limit claim 6 to a preferred embodiment.

Second, TK relies on extrinsic evidence in the form of Johnson's declaration and testimony from the inventor. This is problematic. Expert testimony is of limited worth, and may not be used to construe claim in a manner that is unsupported by the intrinsic evidence. Phillips, 415 F.3d at 1318. "Only if there were still some genuine ambiguity in the claims, after consideration of all available intrinsic evidence, should the trial court have resorted to extrinsic evidence, such as expert testimony." Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1584 (Fed. Cir. 1996). "[W]here the patent documents are unambiguous, expert testimony regarding the meaning of a claim is entitled to no weight." Id. TK has not argued that after considering the intrinsic evidence, there is some genuine ambiguity in the claims.

Even if Johnson's testimony is considered, it does not carry the day. Johnson says that the '891 patent teaches that the weight can only be concentrated at the narrowest portion of the substrate, reasoning that concentrating the weight requires putting the resistors where they would maximize the strain, i.e. on the narrowest portion. The patent, however, does not state that the weight must be maximized at a certain point, only that the weight is "concentrated" on the neckdown region. The patent does, however, state that "[s]everal strain gage resistors 53A and 53 B are arranged on surface 41A at the junction of the neckdown region and the first and second end, respectively." (the '891 patent, Col. 4, ll. 26-28). Thus, the location of the resistors is not restricted to only the neckdown region, but may also be on the first and second ends of the substrate.

Regarding the testimony of the inventor, Patrick B. Blakesley, “[t]he subjective intent of the inventor when he used a particular term is of little or no probative weight in determining the scope of a claim (except as documented in the prosecution history).” Markman, 52 F.3d at 985 (emphasis in original); see also E-Pass Techs., Inc. v. 3COM Corp., 343 F.3d 1364, 1370 n.5 (Fed. Cir. 2003). The Federal Circuit has clearly explained:

Whether an inventor’s testimony consistent with a broader or narrower claim scop, that testimony is still limited by the fact that an inventor understands the invention but may not understand the claims, which are typically drafted by the attorney prosecuting the patent application. As we have explained, “it is not unusual for there to be a significant difference between what an inventor thinks his patented invention is and what the ultimate scope of the clams is after allowance by the PTO.” *Id.* Moreover, [defendant’s] asserted approach, to rely on inventor testimony when it is contrary to interest, is unworkable. It would require a case by case determination as to whether an inventor is testifying against his or hr interest. The inventor might testify to broad claim scope in order to increase the likelihood of a finding of infringement. The inventor also might testify to a narrower claim scope to avoid a challenge to the validity of the patent. We hold that inventor testimony as to the inventor’s subjective intent is irrelevant to the issue of claim construction.”

Howmedica Osteonics, Corp. v. Wright Medical Tech., Inc., 540 F.3d 1337, 1346-47 (Fed. Cir. 2008). In Howmedica, the Federal Circuit noted that an inventor’s testimony may be relevant as expert testimony “to understand the established meaning of particular terms in the relevant art. *Id.* at n. 5 (citing Phillips v. AWH Corp., 415 F.3d at 1303, 1318 (Fed. Cir. 2005) (en banc). However, that is not the case here.

TK’s interpretation also attempts to limit the neckdown region to a substrate portion that must connect the first and second ends to the exclusion of any other regions being between the first and second ends. While that is a preferred embodiment, claim 6 is not limited to only that embodiment. Claim 6 requires only that

a neckdown region is “between” the first and second ends of the substrate. It does not state that a neckdown region must directly connect to the both of the first and second ends. To limit claim 6 such that the neckdown region must connect the first and second end of a substrate would be to improperly read a limitation from a preferred embodiment into the claim. See Teleflex, 299 F.3d at 1328. Had the inventor deemed it necessary that the neckdown region must connect directly to both the first and second ends, the patent could have specified as such. It does not.

Finally, TK says that CTS’s interpretation renders the claim indefinite. This argument proves too much. Whether a claim satisfies the definiteness requirement is a question of law. Atmel Corp. v. Info. Storage Devices, Inc., 198 F.3d 1374, 1378 (Fed. Cir.1999). In deciding definiteness, a court determines whether those skilled in the art would understand what is claimed when the claim is read in the context of the entire patent, including the specification. Personalized Media Comms., Inc. v. Int’l Trade Comm’n, 161 F.3d 696, 705 (Fed. Cir. 1998). “[I]f the claim is subject to construction, i.e., it is not insolubly (sic) ambiguous, it is not invalid for indefiniteness.” Bancorp Servs., L.L.C. v. Hartford Life Ins. Co., 359 F.3d 1367, 1371 (Fed. Cir. 2004).

As explained above, CTS’s interpretation is that the neckdown region is a relatively narrower connecting portion. “Relatively narrower” is an easily understood term of degree, namely, whether one portion is narrower than another portion. By reading the term “relatively narrower” in the context of claim 6, it is clear that the neckdown region is narrower than portions of the substrate to which it is connected. This meaning is easily discernable from Figure 3 and easily understood from the ordinary meaning of neck.



The claim and specification also further clarifies what is the claimed “neckdown region” by explaining that it is the area where there is a concentration, i.e., increase, in the strain on the substrate. There is no indication that a person of ordinary skill in the art would be unable to determine where there is an increase in the strain on a substrate. Thus, TK’s indefiniteness argument is not persuasive.

#### **V. Conclusion**

The Court adopts CTS’s interpretation. It is consistent with the ordinary meaning of “neck,” is in line with the teachings of the ‘891 patent. The phrase “neckdown region” means “a relatively narrower elongated connecting portion.”

SO ORDERED.

S/Avern Cohn  
AVERN COHN  
UNITED STATES DISTRICT JUDGE

Dated: July 5, 2012

I hereby certify that a copy of the foregoing document was mailed to the attorneys of record on this date, July 5, 2012, by electronic and/or ordinary mail.

s/Julie Owens  
Case Manager, (313) 234-5160